

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**6**

**DECISION**

**TOPIC**

AGREEMENT 2008-7157-01, Performance Based Training

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The Department requests Commission approval of a contract in the amount of \$106,163 with the Process Applications, Inc., for Performance Based Training.

In 2006, the department joined the Area Wide Optimization Program, a network of states and EPA regions that work to encourage public water supplies using surface water as a source to go beyond the regulatory requirements to produce a high quality finished water. Research has shown that many systems have the potential to go beyond the requirements for turbidity in finished water and thereby provide additional public health protection by reducing the potential for a waterborne disease outbreak. This can usually be accomplished without additional infrastructure and at a low cost to the utility and its customers. In conjunction with the program, many states have elected to provide training to transfer the skills necessary for optimization to water treatment plant operators. The proposed training will be offered to six to eight selected treatment plants and will consist of five classroom and hands-on training sessions facilitated by department staff. Performance based training represents a unique opportunity for the operators since there is a lack of hands on training available for surface water treatment operators at the higher levels of certification. Performance data will be tracked for each participating plant prior to and following the training so that its impact can be documented.

Funding for this contract comes from Drinking Water State Revolving Fund (DWSRF) Other Authorized Use Set-aside, which may be used for implementing the state's capacity development initiatives, and from fees collected through the operator certification program.

The proposal from Process Applications, Inc. (PAI) was the only proposal received in response to the request for proposals, but the selection committee felt this proposal should be accepted based on the following:

- PAI is nationally recognized for its development of the Area Wide Optimization and Performance Based Training concepts to improve the performance of existing water and wastewater utilities
- PAI has completed eleven PBT sessions for thirteen states and 14 tribal systems since 1999
- The success of PBT has been well documented in other states, and the skills taught to the operators go beyond technical training to provide leadership and management skills that are not generally provided during training.

Chuck Corell  
Water Quality Bureau  
Environmental Services Division

June 29, 2007

**Request For Applications Title:** Performance Based Training  
**Contract Awarded to:** Process Applications, Inc. (PAI)  
**Amount Available:** \$106,163  
**Prepared by:** Jennifer Bunton

**Approved By:** \_\_\_\_\_  
**Date:** \_\_\_\_\_  
Water Quality Bureau Chief

**Selection Committee Members:**

Jennifer Bunton                      Mark Moeller  
Paul Brandt

**DNR Request for Application Selection Process:**

The purpose of this Request for Proposals (RFP) is to solicit proposals from qualified service providers to provide training for six to eight Iowa surface water treatment systems to result in measurable improved turbidity removal performance for the facilities. The duration of the contract will be eighteen months.

<b>RFP Timeline</b>	<b>Date</b>
Targeted Small Business Notice Posted	March 29, 2007
RFP sent to 3 Vendors	April 4, 2007
Letter of Intent to Propose Due	April 16, 2007
Written Questions Due by 4:30 PM CT	April 16, 2007
Response to Questions Issued	May 4, 2007
Closing Date for Receipt of Proposals 4:30 PM CT on	May 31, 2007
Selection Committee Meeting Date	June 29, 2007

**Evaluation:**

Below is the selection committee's review of the proposal based on the selection criteria.

Vendor	Scope of Work	Qualification of Contractor	Project Cost	Reporting and Time Frames	Committee's Judgment of Proposal	Total Score
PAI	29	30	8	9	20	96
Total Score Possible	30	30	10	10	20	100

**Evaluation Notes:**

Only one proposal was received in response to the RFP, but it is an excellent proposal. Process Applications is uniquely qualified to provide this training

because they developed the concept of training water system operators using the PBT method.

**Recommendation:**

The selection committee recommends that the contract be awarded to Process Applications, Inc.

# **IOWA DEPARTMENT OF NATURAL RESOURCES**

## **AGREEMENT 2008-7157-01**

**With**

### **PROCESS APPLICATIONS, INC.**

The Contractor shall provide the following services in accordance with the defined performance criteria as set forth below and as detailed as per Attachment A, Scope of Services from the Contractor's Bid Proposal.

#### **5.1 Plant Selection.**

Prior to the first PBT session, the Contractor shall provide input as necessary, into the selection of the plants that will participate in the PBT. The contractor shall provide a template for site selection criteria and shall be available for consultation during the site selection effort.

#### **5.2 Facilitator Training.**

A core team of facilitators shall be assembled from representatives of the Department's central and field office staff. These facilitators shall include persons who have previously participated as team members on a minimum of three CPEs, as well as persons who have not been exposed to the CPE process. The facilitators shall be assigned individual plant(s), and shall be the main point-of-contact for the plant personnel at their assigned plant(s). The facilitators shall conduct all required site visits, phone calls, and other contact with their assigned facilities. This facilitation includes preparing memorandums of record from site visits and phone calls. The Contractor is not expected to generate memos and/or reports, but shall be expected to review and provide guidance on memos and reports generated by the plant facilitators.

The Contractor shall provide a two-day orientation on the roles and expectations of a facilitator, provide a review of the training series materials, and establish data collection and monitoring needs for the project. This orientation shall be provided prior to the first PBT training session. This orientation may take place just prior to the first PBT session at a time and location mutually agreed upon by the Contractor and the Department.

#### **5.3 Training Sessions.**

The PBT shall consist of five training sessions, to be held at approximately quarterly intervals. Dates shall be mutually agreed upon by the Contractor, the Department, and the individual plants participating in the training. The Contractor shall be responsible for conducting these five sessions, to include development and presentation of materials during the sessions. Each session is expected to last one day (with the plant staff), and shall include a debriefing session with the plant facilitators following the training session. The Contractor shall provide two trainers for each session.

The Contractor shall provide an outline of each session approximately three months prior to each session, for review by the Department. The location of the training sessions shall be coordinated by the Department, with some of the sessions to be held at participating facilities in order to incorporate hands-on efforts during the sessions.

Efforts addressed during the PBT sessions may include the following: Adoption of optimized performance goals, sampling, testing, and data development, special studies development, coagulation control, conducting jar testing, pump feed rates, chemical

dosages, filter backwash procedures, and other operational guidelines. In addition, guidance shall be provided to individual water systems relative to other changes related to operation, maintenance, and administration factors.

### 5.3.1 Performance Based Training Format and Content

Session No.	Session Content*	Follow-Up Assignments
Facilitator Training -Classroom/Plant	Review expectations of a Facilitator. Conduct on-site activities to assess performance and jar test parameter data collection (one plant). Develop skills to better support water system personnel.	Enter baseline year data into optimization software. Assess plant for determining jar test parameters.
Session 1 – Classroom	Optimization performance goals. Sampling and data collection (Participants and Administrators attend).	Adopt utility performance goals. Develop sampling guideline. Initiate/modify data collection.
Session 2 – Conducted in a WTP	Operator special study skill development for problem solving. Dosage control.	Develop and implement two special studies. Develop guidelines on dose control.
Session 3 – Conducted in a WTP	Coagulation control tool development including approach for calibration of the jar test for plant-specific application.	Develop operational guideline for preparing stock solution. Calibrate jar test to match plant conditions.
Session 4 – Classroom	Review plant performance status and prioritize key areas for optimization. Review potential special studies for each plant.	Maintain performance-monitoring spreadsheet. Conduct high priority special studies. Prepare reports for Session 5.
Session 5 – Classroom	Presentations of plant performance and special study results by operators (Administrators attend). Demonstrate technical and problem solving skills that were developed during training.	Ongoing data monitoring. Ongoing special studies.

\*Note that leadership and management skill training tools are applied in all sessions. These include participation in, and feedback on, workshops; presentation of homework results; development of guidelines and special studies; etc.

### 5.3.2 Training Session Follow Up

Throughout the PBT effort, the facilitators from the Department will independently conduct any needed site visits at their individual facilities, without the physical presence of the Contractor. During these site visits and between the training sessions, the Contractor shall provide data interpretation, office consultation, and technical support to the facilitators. A one to two-hour conference call shall be held among the Contractor and plant facilitators between each session (4 calls). Individual plants and the Department personnel will complete all data compilation and analysis. The Contractor is not expected to compile or analyze individual plant performance data, with the exception of minimal data manipulation required for session material

### 5.3.3 Schedule of Performance Based Training Activities\*

Dates (On or About)	Activity	Status
September 2007	Site Selection	Tentative Schedule Pending Contract Negotiations
September 2007	Final Site Selection Conference Call	Tentative Schedule Pending Contract Negotiations and Participant Availability
October 28 – 29, 2007	Facilitator Training Session	Tentative Schedule Pending Contract Negotiations and Participant Availability
December 9, 2007	PBT Session 1	Tentative Schedule Pending Contract Negotiations and Participant Availability
February 18, 2008	PBT Session 2	Tentative Schedule Pending Contract Negotiations and Participant Availability
Jun 1, 2008	PBT Session 3	Tentative Schedule Pending Contract Negotiations and Participant Availability
September 8, 2008	PBT Session 4	Tentative Schedule Pending Contract Negotiations and Participant Availability
December 28, 2008	PBT Session 5	Tentative Schedule Pending Contract Negotiations and Participant Availability
Jun 30, 2009	Support Final Report Development	Tentative Schedule Pending Contract Negotiations

\*The timing of this schedule is also dependent on PAI completing corporation registration activities in the State of Iowa if selected to conduct this contract.

## 5.4 Contract Service Evaluation

### 5.4.1 Objectives

The objectives of the microbial Performance Based Training series are to:

- Address the common performance limiting factors identified in surface water treatment plants (e.g., application of concepts and testing to process control).
- Improve the finished water quality of the surface water treatment plants through the implementation of optimization techniques that protect customers from pathogenic organisms such as *Giardia* and *Cryptosporidium*.
- Promote a peer-to-peer exchange on technical, leadership, and management issues related to water treatment optimization.
- Support the development of a training model that can be used as a basis for addressing other technical and managerial issues faced by surface water treatment plants.
- Develop PBT skills for the IDNR staff so that they can consider implementing PBT at additional facilities beyond the scope of this proposal.

### 5.4.2 Final Evaluation Report

This report shall be \_\_\_\_\_ to document the overall impact that the training has had on participating public water systems, to discuss the impact of the training on IDNR staff, to outline other benefits and outcomes, and to make recommendations for follow-up and ongoing activities.

## 5.5 Deliverables

**5.5.1** The Contractor shall provide the following information to the Department:

<b>Deliverable</b>	<b>Due By</b>
A certificate of insurance, which indicates coverage and notice provisions as required by this contract.	Beginning of contract
Teleconference call, face-to-face meeting or e-mail communication, quarterly or more frequently, as necessary, to discuss and report the status of the contract	Contractor to initiate and schedule in advance, meetings no less frequently than once each month.
Task 1 – Pre-Training Planning,  Communication And Coordination,  Plant Selection	PAI shall provide written and electronic documentation of items in this task within fourteen days of each activity.
Task 2 – Facilitator Training	PAI shall provide two trainers for this training and all training materials (agenda, presentations and workshops) and spreadsheets to support this training effort.
Task 3 – Provide Training To Selected Public Water Systems	PAI shall provide two trainers for each training event and all training materials (agendas, presentations, workshops, spreadsheets, homework assignments, and documentation of training session follow-up activities) to support these training efforts. PAI shall provide the training in accordance with the sessions outlined in the table in <b>3.3.1</b> .
Task 4 – Post-Training Event	PAI shall document all discussions and

<b>Deliverable</b>	<b>Due By</b>
Communication And Coordination	distribute notes to the IDNR coordinator  for distribution to conference call  participants and the IDNR project  manager within five business days of each  scheduled call.
Task 5 – Draft Report Support	PAI shall provide IDNR with example  report outlines and written or electronic  comments on the report outline and draft  report.
Final Contract Evaluation Report	June 30, 2009

**5.5.2** The Department will provide the following information and resources relative to this contract:

<b>Item</b>	<b>No Later Than</b>
Teleconference call, face-to-face meeting or e-mail communication, monthly or more frequently, as necessary, to discuss and report the status of the contract	As scheduled
Evaluation/approval of Reports	Within two weeks of receipt
Conduct plant contacts, including any administrative site visits deemed necessary to candidate plants to inform them about PBT, including expectations for participating in the training.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Coordinate, conduct, and document 1/2-day site visits immediately after Session 1.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Compile turbidity data for participating plants for one year prior to the start of training, facilitate data collection for estimated 12 to 16 months during the training and six months following the training, and support data management requirements during and following the training.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Coordinate the location of the training sessions, room setup, and equipment needs (e.g., projector, screen, flip chart, sign-up sheets, participant notebooks, nametags, name placards, and workshop equipment needs such as jar	Tentative Schedule Pending Contract Negotiations and Participant Availability



Item	No Later Than
testing equipment, final session awards, or certificates of completion). IDNR will send letters or e-mail announcements to participating plants prior to each session.	
Assist with facilitation during each session, including workshops and documentation of session activities.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Request, compile, and transmit phone call documentation via e-mail to PAI and other facilitators so that individual plant progress can be tracked.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Support with documenting conference call notes and distribute call notes to call participants.	Tentative Schedule Pending Contract Negotiations and Participant Availability
Facilitate plants during and between training sessions, including: conducting an initial site visit following the first session, providing guidance on homework assignments, reviewing and commenting on all completed homework assignments, preparing participants for session feedback, and documenting site visits and phone calls.	Tentative Schedule Pending Contract Negotiations and Participant Availability
IDNR will collect and compile individual plant performance data prior to key PBT sessions (specifically Sessions 4 and 5) for use in session(s).	Tentative Schedule Pending Contract Negotiations and Participant Availability
IDNR will support ongoing data collection from participating facilities to support the documentation of training impact for the final report (i.e., data collection is anticipated for approximately six months following the last training event).	Tentative Schedule Pending Contract Negotiations and Participant Availability